## **TECHNICAL DATA SHEET**



# BIOHYD FR HFDU

FULLY SYNTHETIC BIODEGRADABLE HYDRAULIC FLUID **FIRE-RESISTANT** / HFDU SPECIFICATION

#### Description

**LUBECO<sup>TM</sup> BIO HYDRAULIC OIL FR HFDU** is a high performance, fire-resistant, readily biodegradable hydraulic fluid based on synthetic esters. A special additive package delivers excellent extreme pressure properties, thermal oxidation resistance, anti-wear and non-foaming control.

Thanks to the high Viscosity Index **BIO HYDRAULIC OIL FR HFDU** provides extremely wide operating temperature range. **BIO HYDRAULIC OIL FR HFDU** allows for very long oil-change intervals resulting in cost effectiveness and CO2 emissions reduction.

BIO HYDRAULIC OIL FR HFDU is produced in viscosity classes 32/46/68.

#### **Specifications**

• HFDU: ISO 6743/4

#### Areas of Application

**BIO HYDRAULIC OIL FR HFDU** is specifically designed for use in all hydraulic systems, both hydrostatic and hydrodynamic. **BIO HYDRAULIC OIL FR HFDU** is recommended for hydraulic applications in environmentally sensitive areas with a high fire risk – immediate vicinity of potential flame or heat sources. **BIO HYDRAULIC OIL FR HFDU** is particularly used in mining, power generation, railway and power line maintenance, construction, earth moving and other industries.

**BIO HYDRAULIC OIL FR HFDU** is well compatible with the most commonly used elastomers and it can be mixed with other mineral or synthetic hydraulic fluids.

Before changing over to **BIO HYDRAULIC OIL FR HFDU range** verify compatibility and enquire for our filling instructions.

Note: Cleaning function of BIO HYDRAULIC OIL FR HFDU fluids may loosen any deposits in the hydraulic system.

#### Characteristic features:

- Very good fire-resistance reducing possibility of ignition in case of fluid leakage;
- Ultimate performance and anti-wear protection;
- Outstanding thermal oxidation stability;
- Extra high Viscosity Index wide operating temperature range;
- Very long oil-change interval > reduction in CO2 emissions;
- Non-toxic, readily biodegradable
- EU Ecolabel Certificate of Environmental Excellence (No. CZ/027/001)









### Typical characteristics

PARAMETER	UNIT	TEST METHOD	BIOHYD FR HFDU ISO VG 32	BIOHYD FR HFDU ISO VG 46	BIOHYD FR HFDU ISO VG 68
Density at 15 °C	kg/m <sup>3</sup>	ISO 12185	965	920	922
Kinematic Viscosity at 40°C (ISO VG)	mm²/s	ISO 3104	32	46	68
Kinematic Viscosity at 100°C (ISO VG)	mm²/s	ISO 3104	6.9	9.5	13.8
Fire point	°C	ASTM D92	> 360	> 360	> 300
Pour point	°C	ISO 3016	< -35	< -40	< -40
Flash point, COC	°C	ISO 2592	> 320	> 320	> 300
Viscosity index	-	ASTM D2270	185	196	210
FZG Gear Test A 8.3/90 Damage load level	rating	DIN 51354/2	> 12	> 12	> 12
Copper Strip Corrosion at 100°C/3h			la	la	la
Biodegradability (within 28 days)	%	OECD 301D	Exceeds	Exceeds	Exceeds

The above-listed data represent average values. Material Safety Data Sheet available on request.

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